UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

CONTROL - Coeur d'Alene Insect (Annual Report) February 1, 1940

INSECT CONTROL REPORT

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FALL - 1940 1939



Neal D. Nelson Associate Pathologist

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INTRODUCTION:

During the period from August 1 to September 4 a forest insect survey was made of the Coeur d'Alene National Forest by the Bureau of Entomology and Plant Quarantine, Forest Insect Laboratory of Coeur d'Alene, Idaho.

A serious bark beetle infestation was reported in the Shoshone District which is comprised of the following units; Sisson's, Yellow Dog River, Downey Creek and North Yellow Dog. It was estimated that 9,744 trees distributed over an area of 15,960 acres were infested by mountain pine beetle. On the basis of data submitted by this survey control work was recommended for this area. It was estimated that 3,000 trees could be treated by CCC labor and that the remaining 6,744 trees would be treated by men paid from regular funds providing such funds were available.

The recommendation was submitted to Washington September 7, and on September 19 notice was received that \$42,000 would be made available for control work. During this period such plans were made as seemed practical in view of the uncertainty of the materialization of the project.

The first camp was established at Sisson's Bridge September 21 and during the following day and a half, six six-man spotting crews were organized and given preliminary training. By Monday, September 25, three camps had been established and spotting work was being performed in these camps. The other two camps were established on September 26 and 27 and spotting work began on those dates. Treating work started in three camps on September 27 and in the other two camps on September 29 and continued until November 7. Even though closing the regular camps on or before that date, it was evident that the CCC crews could complete the treating of the remaining trees thereby making a saving of regular funds.

The Devil's Elbow CCC Camp F-154 started treating on October 12, and continued until December 21. The Big Creek CCC Camp F-132 started treating on October 23, and continued until December 22.

ORGANIZATION AND ADMINISTRATION - REGULAR PAID CAMPS:

As insect control work is done in cooperation with the Bureau of Entomology and Plant Quarantine, Forest Insect Laboratory, the work was organized and administered in the following manner:

The Bureau of Entomology and Plant Quarantine made available the services of Dr. W. D. Bedard whose function was to provide the technical advice for the project. This included the training of check spotters, chief spotters and spotters; advice as to effective methods of control and the selection of areas to be eliminated from spotting or control work. All other matters pertaining to the control job were a function and responsibility of the Forest Service.

It was deemed advisable to establish five fiftyman camps. Large camps were used due to the necessity of completing a large job in less than six weeks, and the fact that additional campsites were not available.

METHODS:

Spotting

The spotting of infested trees was started on September 25 and continued until the whole area was completed on November 1. All spotting work was done by crews paid from regular funds, whether the trees were to be treated by CCC or regular paid workers.

Six-man spotting crews were used consisting of four spotters, one compassman and a chief spotter under whose leadership the entire crew operated. The compassman ran compass, paced, made the map, designated tree numbers and kept the records. Four spotters worked in line, two on either side of the compassman; each inspected, reported and tagged all infested trees on a one chain strip.

The idea was advanced that smaller crows might be more efficient and effective. It was decided however, that due to a lack of experienced men for the supervision of such work we would continue the spotting with the sixman crows, especially since the weather was very favorable for good spotting work.

Treating

At the beginning of the control job it was decided to treat by felling, decking and burning of infested trees.

This method was employed throughout the job with the exception of the treatment of isolated trees having a small infested area which were treated by peeling.

Five and six-man treating crews were used, depending upon the size and concentration of infested trees.

Various schools of thought existed concerning proper methods of log deck location; one contended that all decks should be made with logs lying up and down the hill; the opposite contention was that decks should be constructed with the logs horizontal with the slope; and still another maintained that decks should be constructed in the easiest manner adaptable to the particular terrain. The latter method proved logical as all decks burned satisfactorily if they were constructed correctly.

Had it been possible to burn the decks as they were constructed the controversy would not have arisen. It was not until the last week of October that the decks could be burned with any degree of safety or efficiency.

PERSONNEL:

Due to the size of the project undertaken there were insufficient experienced men to fill all of the key positions. Twelve men secured from the St. Joe Forest were used as chief spotters, treating strawbosses and compassmen. Even though all were not experienced in "bug" work they proved to be very satisfactory and a considerable aid to the project.

Of the five camp foremen, three were experienced, having had three to five seasons of insect control work; one had only one season's experience in this particular type of work but had been camp foreman of disease control thirty-man camps for four years; the other foreman, while not an experienced insect control man, is a Junior Forester who demonstrated his ability satisfactorily in managing his camp and work.

Thirteen chief spotters were used and while all of these were not experienced in this particular phase of the work, ten had worked on insect control before and only three were totally inexperienced. However, the work of the inexperienced men was comparable to that of the experienced.

t was decided shortly after the control work started, that it would be advantageous to the work to employ two walking bosses. One contacted three camps and the other

supervised the work of the remaining two camps. It is felt that this increased both the quality and quantity of work.

CCC CONTROL WORK:

Production from CCC workers was considerably greater than anticipated. It was estimated that they would treat about one-half tree per man-day. At the conclusion of the job, however, the production was found to have been .94 trees per man-day.

Each CCC foremen usually has under his supervision 20 to 25 enrollees including two rated men to assist him in supervision. For efficient insect control work this amount of supervision seemed inadequate and would have necessitated the organizing of crews too large for efficient work.

From regular funds used to supplement CCC work, strawbosses were employed to supervise small crews of six enrollees. Judging from the results obtained this practice seems to have been justified. The more inaccessible areas were treated by the regular camps, leaving areas near the roads for CCC work. Weather conditions were favorable throughout the whole job. Although the CCC crews worked until December 22, conditions were much better than in average years.

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COST REPORT

Project - Shoshone District			
Period of work - Regular paid crews September 25 - November 7. CCC Crews October 12- December 22.			
Acres Spotted			11,840
Acres Treated11,840			11,840
Total Expenditures\$39,600.00			\$39,600.00
Amount expended by regular paid crews\$34,204.93 Amount expended to supplement CCC treating (Strawbosses)2,955.63 Prorated cost of spotting trees treated by CCC2,439.44			
TOTAL regular funds to supplement CCC \$ 5,395.07			
Cost per tree treated by regular paid crews			
(3,631 CCC M.D. 's x \$1.50 = \$5,446.50 $+$ \$5,395.07 $+$ \$1,328.33 cost of CCC Foremen = \$12,169.90 $+$ 3,421 trees)			
OUTPUT			
Number trees spotted			
Treating	No.Trees	No. of Man Days	No. of Trees Per Effective M.D.
Regular Crews	5,786	3,714	1.56
CCC Crews	3,431	3,631	.94
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